

Claims

1. An apparatus for aspirating, irrigating and/or cleansing wounds, characterised in that it comprises
- 5 a) a fluid flow path, comprising
- i) a conformable wound dressing, having
a backing layer which is capable of forming a relatively fluid-tight seal or closure over a wound and
at least one inlet pipe for connection to a fluid supply tube, which
10 passes through and/or under the wound-facing face, and
and at least one outlet pipe for connection to a fluid offtake tube, which passes through and/or under the wound-facing face,
the point at which the or each inlet pipe and the or each outlet pipe passes through and/or under the wound-facing face forming a
15 relatively fluid-tight seal or closure over the wound,
at least one inlet pipe being connected to a fluid recirculation tube, and at least one outlet pipe being connected to a fluid offtake tube;
- ii) a means for fluid cleansing having at least one inlet port connected to a fluid offtake tube and at least one outlet port connected to a
20 fluid recirculation tube; and
- iii) a biodegradable scaffold located under the backing layer and configured to be placed in contact with a wound bed in use;
- b) a fluid reservoir connected by a fluid supply tube to an integer of the flow path (optionally or as necessary via means for flow switching
25 between supply and recirculation);
- c) a device for moving fluid through the wound dressing and means for fluid cleansing, and optionally or as necessary the fluid supply tube; and
- e) means for bleeding the flowpath,
30 such that fluid may be supplied to fill the flowpath from the fluid reservoir via the fluid supply tube (optionally or as necessary via the means for flow switching) and recirculated by the device through the flow path.
2. An apparatus according to claim 1, characterised in that the
35 biodegradable scaffold comprises a three-dimensional mesh, sponge or felt.

3. An apparatus according to claim 1, characterised in that the biodegradable scaffold comprises a poly(hydroxy acid) or ester thereof selected from poly(glycolic acid), poly(L-lactic acid), poly(D-lactic acid) and esters thereof, or copolymers or blends thereof.
- 5 4. An apparatus according to claim 1, characterised in that the biodegradable scaffold comprises a biologically sourced biodegradable substantially protein based polymer selected from collagens, fibronectins, or fibrins, as whole molecules or derivatives thereof from proteolytic or chemical treatments, or blends thereof; or a biodegradable substantially protein based polymer selected from collagens, fibronectins, or fibrins, or fragments thereof, produced through recombinant DNA techniques, or blends thereof.
- 10 5. An apparatus according to claim 1, characterised in that it comprises a means for fluid cleansing that is a single-phase system, in which the circulating fluid from the wound passes through the means for fluid cleansing and materials deleterious to wound healing are removed, without the circulating fluid coming into direct or indirect contact with another fluid in the means for fluid cleansing.
- 15 20 6. An apparatus according to claim 1, characterised in that it comprises a means for fluid cleansing that is a two-phase system, in which the circulating fluid from the wound passes through the means for fluid cleansing and materials deleterious to wound healing are removed, by the circulating fluid coming into direct or indirect contact with another fluid in the means for fluid cleansing.
- 25 7. An apparatus according to claim 3, characterised in that in the means for fluid cleansing, the circulating fluid from the wound and the other fluid in the means for fluid cleansing are separated by an integer which is selectively permeable to materials deleterious to wound healing.
- 30 8. An apparatus according to claim 3, characterised in that in the means for fluid cleansing, the circulating fluid from the wound and the other fluid in the means for fluid cleansing are separated by an integer which is not
- 35

selectively permeable to materials deleterious to wound healing, and the other fluid comprises and/or is in contact with a material that removes materials deleterious to wound healing.

- 5 9. A conformable wound dressing assembly for use in an apparatus according to claim 1, characterised in that it comprises a dressing as recited in claim 1 and a biodegradable scaffold.
- 10 10. A method of treating wounds to promote wound healing using the apparatus for aspirating, irrigating and/or cleansing wounds according to claim 1.